NEYMAN, V.S.; RUMYANTSEVA N.N.

Using hydrogen clay for studying the surface conductivity of capillary systems. Nauch.-tekh. sbor. po dob. nefti no.19:3-6 '63. (MIRA 17:8)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

BERMAN, L.B.; BASIN, Ya.N.; NEYMAN, V.S.

Using neutron gamma logging in creating and operating underground gas reservoirs. Neftegaz. geol. i geofiz. no.7:50-53 '64.

Estimating the gas saturation factor from the data of neutron-gamma logging. Ibid.:53-57 (MIRA 17:8)

1. Spetsgeofizika.

KIMYANTSEVA, N.N.; NEYMAN, V.J.

Studying the surface conductivity of sandy-argillaceous systems. Neftegaz. geol. i geof. no.5:44-46 '65. (MIRA 18:7)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

MEY[illegible], V.S.; BERMAN, I.B.

Effect of capillary forces on the electrical parameters of reservoirs. Nauch.-tekh. sbor. po dob. nefti no.37:83-87 '55. (MLRA 10:2)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

DAKHNOV, V.N., professor; MEYMAN, V.S., student.

Relation of the apparent specific resistivity to the spacing between adjacent electrodes of the gradient-probe. Trudy MNI no.15:143-147 '55. (MLRA 9:8)
(Oil well logging, Electric)

SHAPIRO, D.A.; HEYMAN, V.S.

Estimating the porosity of strata by self-potential diagrams. Trudy VNII no.29:156-165 '60. (MIRA 13:10)

1. Al'met'yevskaya geofizicheskaya kontora.
(Oil well logging, Electric)

BASIN, Ya.N.; BERMAN, L.B.; NEYMAN, V.S.

Possible ways to identify porous and fractured limestones using commercial geophysical methods. Prikl. geofiz. no.49:153-160 '64. (MIRA 17:7)

BERMAN, L.B.; MEYMANN, V.S.

Concerning the zone of penetration in producing layers. Prikl. geofiz. no.40:174-180 '64 (MIRA 18:1)

NEYMAN, V. V.

Propaganda estestvennonauchnoi literatury v sel'skoi biblioteke /Popularizing natural science books in rural libraries/. Moskva, 1953. 36 p. (Gos. ordena Lenina b-ka SSSR im. V. I. Lenina. Nauch.-metod. kabinet bibliotekovedeniia. V pomosch' sel'skomu bibliotekariu)

SO: Monthly List of Russian Accessions, Vol. 7, No. 3, June 1954.

NEYMAN, V.V.

30(4) PHASE I BOOK EXPLOITATION SOV/2799

Moscow. Publichnaya biblioteka. Nauchno-metodicheskiy kabinet vedeniya

Nauchno-tekhnicheskiye znaniya-v massy; sbornik materialov v pomoshch' massovym bibliotekam (Scientific and Technical Knowledge for Everyone; Collection of Materials for the Aid of Public Libraries) Moscow, 1958. 196 p. Errata slip inserted. 15,000 copies printed.

Compilers: G. S. Multanovskaya and V. V. Neyman; Ed.: D. Yagodina, Candidate of Pedagogical Sciences; Tech. Ed.: L. N. Khelemskaya.

PURPOSE: This book is intended for librarians.

COVERAGE: This collection of articles reviews popular scientific and technical literature to aid public library workers in disseminating science information to the reading public. The role and significance of principal industries in the technological development of the USSR are covered. The last two articles describe the experience of individual libraries in promoting popular science books. The appendix gives a list of bibliographic aids for popular-science literature. No personalities are mentioned.

AVAILABLE: Library of Congress (Z7911 .M58)

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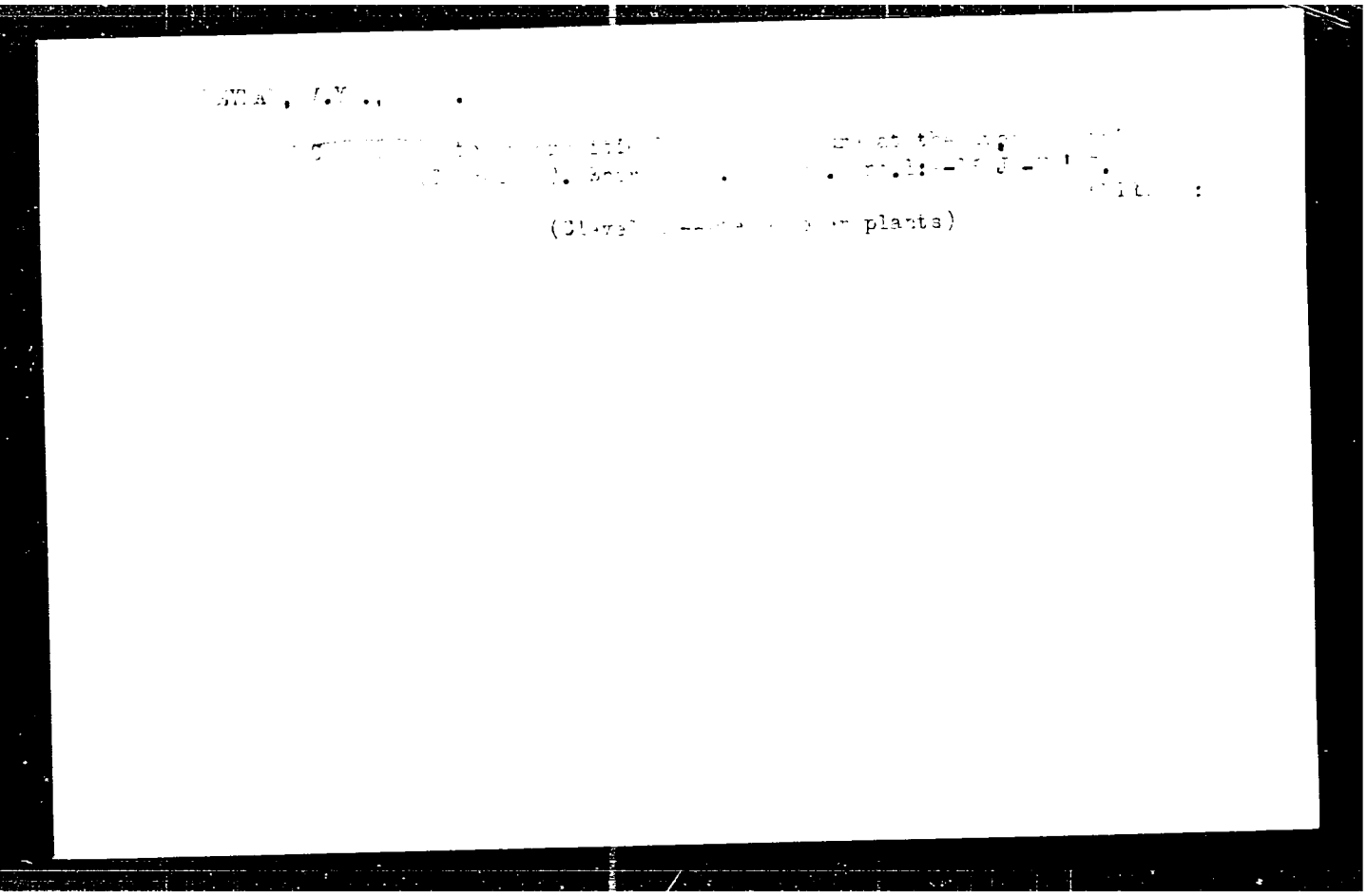

NEYMAN, V.Ya., inzh.

Electric station to operate on supercritical steam with 450 magawatt units. Energokhoz.za rub. no.4:26-28 Jl-Ag '57. (MIRA 12:11)

(Sullivan county, Ind.--Steam power plants)
(Electric power)

MEYMAN, V.Ya., inzh.

Large gas-turbine power plant in Canada (from "Modern Power and Engineering," 51 no.8 1957; "Oil Engine and Gas Turbine," 28 no.285 1957). Elek.sta. supplement no.6:20-21 N-D '57. (MIRA 11:2)
(Canada--Gas power plants)

MEYMAN, V.Ya., inzh.

The Portland Power Station (USA) equipped with a 520 t/h boiler for 175 atm. and a 165 mw. turbine with axial exhaust. Energokhoz.za rub. no.6:4-9 N-D '58. (MIRA 12:4)
(Portland, Pennsylvania--Electric power plants)

MELIK-PASHAYEV, V.S.; KOCHETOV, M.N.; KUZNETSOV, A.V.; DOLINA, L.P.; Prinimali uchastiye: BELYAYEVSKIY, A.A.; LISUNOV, V.R.; NEYMAN, V.Ye.; CHERNOGLAZOVA, T.Ya.; MAMUNA, V.N.; ZHDANOV, M.A., prof., red.; PERSHINA, Ye.G., ved. red.; YAKOVLEVA, Z.I., tekhn. red.

[Methods for determining the parameters of oil and gas pools for appraising their reserves in platform-type fields using the volumeteric method] Metodika opredeleniia parametrov zalezhei nefti i gaza dlia podscheta zapasov ob"emnym metodom; na mestorozhdeniiakh platformennogo tipa. [By] V.S.Melik-Pashaev i dr. Pod red.M.A.Zhdanova. Moskva, Gostoptekhizdat, 1963. 269 p. (MIRA 16:5)
(Oil reservoir engineering)

NEYMAN, Witold (Poznan, ul. 27 Grudnia 4.)

The Hickey and Hare test in diabetes insipidus. Polskie arch. med. wewn. 28 no.1:57-61 1958.

1. Z III Kliniki Chorob Wewnetrznych A.M. w Poznaniu Kierownik: prof. dr med. F. Labendzinski.
(DIABETES INSIPIDUS, diagnosis
Hickey & Hare test (Pol))

NEYMAN, Witold (Poznan, 27 Grudnia 4.)

Hickey's and Hare's test in diabetes insipidus. Polski tygod. lek. 13 no.46:1828-1830 17 Nov 58.

1. Z III Kliniki Chorob Wewnetrznych A.M. w Poznaniu; kierownik: prof. dr med. F. Labendzinski.
(DIABETES INSIPIDUS, differ. diag.
Hickey's & Hare test (Pol))

LABENDZINSKI, Franciszek; NEYMAN, Witold

Pelger's nuclear anomaly in 2 families in Wielkopolska. Pol. tyg. lek. 17 no.8:298-299 19 F '62.

1. Z III Oddzialu Wewnetrznego Szpitala Miejskiego im. Strusia w Poznaniu; ordynator: prof. dr med. F. Labendzinski; dyrektor: dr med. S. Andrzejewski.

(LEUKOCYTES)

LABENDZINSKI, F., prof. dr.; NEYMAN, Witold; BADYDA, Cyryl.

3d case of Pelger's anomaly in Wielkopolska. Comparison with pseudo-Pelger granulocytic picture in a patient with malignant lymphoma. Pol. tyg. lek. 20 no.1:28-29 4 Ja '65.

1. Z Oddzialu Wewnetrznego Szpitala Miejskiego im. Strusia (Kierownik: prof. dr. F. Labendzinski) i z III Kliniki Chorob Wewnetrznych Akademii Medycznej w Poznaniu (Kierownik: prof. dr. K. Wysocki).

MEYMAN, Ya.L., inzh.

New method for assembling forging and pressing equipment. Mont. i spets.rab.v stroi. 22 no.10:6-9 O '60. (MIRA 13:9)

1. Trest Yuzhtekhmontazh.
(Forging machinery)

KARYAKIN, V.D., inzh.; NEYMAN, Ya.L.

Assembly of production lines in machinery-construction plants.
Mont. i spets. rab. v stroi. 24 no.9:3-5 S '62. (MIRA 15:9)

1. Trest Yuzhtekhmontazh.
(Factories--Equipment and supplies)

NEIMAN, YA.M.

52/2596 (Result of the competition for the best design of cranes for building of few storeys, arranged by the U.S.S.R. National Institute for Technical Equipment). K itogam konkursa VNITO stroitelei na luchshie konstruktsii kranov dlia maloetazhnogo stroitel'stva. Mekhanizatsiia Stroitel'stva, 8(4): 18-21, 1951.

IVYANSKIY, G. B., NEYMAN, YA. M., RUFFEL', N. A.

Mixing Machinery

Mixing machines on construction sites. Stroi. prom. 29 no. 12, 1951

Monthly List of Russian Accessions, Library of Congress, August, 1952, Unclassified.

SOVALOV, I.G., kandidat tekhnicheskikh nauk; NEYMAN, Ya.M., inzhener.

On the technical and economic indices of enterprises producing precast concrete products. Stroi.prom. 34 no.5:38-45 My '56. (MLRA 9:8)

(Precast concrete)

NEYMAN, Ya.M., inzh.

Re-equipping a brick plant for the production of foam glass.
Stroi.i dor.mash. 7 no.10:30-32 O '62. (MIRA 15:11)
(Glass, Cellular)

PRILEPSKIY, F.V., inzh.; NEYMAN, Ya.M., inzh.

Redesigning a seasonal brick plant for the production of agloporite. Stroi.mat 8 no.10:6-10 O '62. (MIRA 15:11)
(Moscow Province--Aggregates (Building materials))

NEYMAN, Yan Markovich, inzh.; MOSYAGIN, Dmitriy Semenovich, inzh.; MESKIN, Boris Yefimovich; ANTONOVA, N.N., inzh.,

[Mechanization and automation of the processes of manufacturing heat insulating materials in renovated brick plants; based on materials of the Main Administration of the Building Materials Industry in Moscow Province] Iz opyta mekhanizatsii i avtomatizatsii protsessov proizvodstva teploizoliatsionnykh materialov na rekonstruirovannykh kirpichnykh zavodakh; po materialam Konstruktorsko-tekhnologicheskoi kontroy Glavmosoblstroimaterialov. Moskva, Gosstroiizdat, 1962. 38 p. (MIRA 17:3)

1. Akademiya stroitel'stva i arkhitektury SSSR. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu. 2. Nachal'nik otdela mekhanizatsii i avtomatizatsii Konstruktorsko-tekhnicheskoy kontory Glavnogo upravleniya promyshlennosti stroitel'nykh materialov i stroitel'nykh detaley(for Neyman). 3. Rukovoditel' sektora tekhnicheskoy informatsii Konstruktorsko-tekhnologicheskoy kontory Glavnogo upravleniya promyshlennosti stroitel'nykh materialov i stroitel'nykh detaley (for Mosyagin). 4. Sotrudnik sektora tekhnicheskoy informatsii Konstruktorsko-tekhnologicheskoy kontory Glavnogo upravleniya promyshlennosti stroitel'nykh materialov i stroitel'nykh detaley (for Meskin).

PLYATSKIY, V.M., kandidat tekhnicheskikh nauk; MEYMAN, Ya.Ya., inzhener.

News in pressure casting. Vest.mash.27 no.12:58-65 D '47.
(Die casting) (MLRA 9:4)

NEYMAN, Ye.A.

Graphs for three-electrode electric probes and layers of limited thickness. Trudy MINKHiGP no.41:128-158 '63.

Device for converting a Usp curve into a curve of self-polarization potentials. 173-177 (MIRA 16:10)

SARKISOV, A.L.; MEYMAN, Ye.A.

Layout of a seven-electrode shielded probe for a three-strand cable with a grounded control of the current of shielded electrodes. Trudy MINKHiGP no.41:178-181 '63. (MIRA 16:10)

KAMENETSKIY, S.G.; NEYMAN, Ye.A.

Detecting the oil-water boundary shift in control wells. Trudy MNI no.12:224-230 '53. (MLRA 9:8)
(Hydrodynamics) (Petroleum engineering)

NEYMAN, Ye. A.

"Use of Electrical Models in the Solution of Problems Relating to the Electrometry of Oil Wells." Cand Tech Sci, Moscow Order of Labor Red Banner Petroleum Inst imeni Academician I. M. Gubkin, Moscow, 1955. (KL, No 14, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

15-57-1-993

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1, p 157 (USSR)

AUTHORS: Dakhnov, V. N., Neyman, Ye. A.

TITLE: The Theory of Electrical Measurements in Drill Holes by Studying the Resistance of Ground Connections (Osnovy teorii elektrometrii skvazhin metodami izucheniya soprotivleniya zazemleniy)

PERIODICAL: Tr. Mosk. neft. in-ta, 1955, Nr 15, pp 46-79.

ABSTRACT: The authors have shown the relationship of resistance of ground connections with different surface forms to resistivity and size of the medium surrounding the ground connection. Formulas are given for determining the resistance of spherical, cylindrical, and simple circular ground connections in homogeneous media. Using a number of assumptions, the authors derive approximate formulas for evaluating true resistance by measuring the resistance of a spherical ground. They derive further formulas for determining the resistance

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The Theory of Electrical Measurements in Drill Holes (Cont.)

of a shielded ground in a uniform medium and in an infinite plate of great thickness, and also in a plate of limited thickness. The latter example is supported by experimental curves, obtained on an electrical model. The graphs obtained from this model represent curves of the relationship

$$\frac{\rho_{eff}^{max}}{\rho_o} = b\left(\frac{h}{d_o}\right)$$

for a sonde with the ratio $L/d_3 = 2.5$ for ratios of $d_3/d_o = 0.3$, 0.4, 0.5, 0.6, and 0.7, where ρ_{eff}^{max} is the maximum apparent resistance of the shielded ground, obtained at the center of the plate, the thickness of which is h; ρ_o is the resistance of the mud; d_o is the diameter of the drill hole; L and d_3 are the length of diameter of the sonde. The results obtained from the electrical model are used to construct curves showing the relationship of apparent resistance, measured with the sonde, to the thickness of the plate, for various ratios of plate resistance to resistance of enclosing rocks. To

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The Theory of Electrical Measurements in Drill Holes (Cont.)

obtain the proper shielding, the current in the shielding electrodes should satisfy the relation

$$\frac{i_f + i_s}{i_f} = \frac{L}{l},$$

where i_f and i_s are the currents of the field and shield electrodes respectively and l is the length of the field electrode. Finally, the authors examine the problem of eliminating from the sonde record the influence of the contact resistance of the field electrode. This is done by calculation or from the corresponding graph.

Card 3/3 N. A. Ts.

NEYMAN, Ye.A., inzhener.

Spherical probe method (ground-resistivity difference method).
Trudy MNI no.15:92-119 '55. (MLRA 9:8)
(Oil well logging, Electric)

NEYMAN, Ye.A., inzhener; MIROSHNICHENKO, Ye.M., inzhener.

Examining the distribution characteristics of the specific electric resistivity in the formation zone impregnated by the drilling fluid. Trudy MNI no.15:120-125 '55. (MLRA 9:8)
(Oil well logging, Electric)

NEYMAN, Ye.A., inzhener.

Studying the relation between the distribution characteristics of specific resistivity in the zone of penetration and between the form of the curve of lateral electric logging. Trudy MNI no.15: 125-142 '55. (MLRA 9:8)

(Oil well logging, Electric)

NEYMAN, Ye.A., inzhener.

Construction of formation models of a given specific electric resistivity for modeling problems on electric well logging. Trudy MNI no.15:147-151 '55. (MLRA 9:8)
(Geophysics--Electromechanical analogies)
(Oil well logging, Electric--Models)

NESTERENKO, G.N.; NEYMAN, Ye.A.

Using micrologging for detecting porous layers in carbonate depostis of western Bashkirian fields. Geol. nefti 1 no.8:46-50 Ag '57. (MIRA 10:12)

1.Volgo-Ural'skiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta geofiziki i Moskovskiy ordena Trudovogo Krasnogo Znameni neftyanoy institut im. akademika I.M. Gubkina.
(Bashkiria--Oil well logging, Radiation)

3(0), 14(5) SOV/152-59-1-3/3

AUTHOR: Neyman, Ye. A.

TITLE: The Plotting of a Diagram for Microsounding Devices According to Electrical Simulation Data (Postroyeniye paletki mikrozondov po dannym elektricheskogo modelirovaniya)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Neft' i gaz, 1959, Nr 1, pp 13-20 (USSR)

ABSTRACT: Up to recent times geophysicists working on oil fields had no diagrams plotted specifically for microsounding devices at their disposal. The article describes the method of simulation of the microsounding method and the results obtained. The rules for the application of the diagram obtained for the quantitative interpretation of microsounding diagrams are given. For the simulation of the microsounding method two contiguous media (drilling liquid and layer) each of which is homogeneous but they differ in their specific resistances had to be created. These two media were represented by two electrolytes with different resistances separated by a partition. The partition was manufactured from a thin tissue soaked in collodion. It was impervious to water and had a high resistance to electric current. - The author goes on to describe briefly the simulating

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The Plotting of a Diagram for Microsounding Devices According to Electrical Simulation Data SOV/152-59-1-3/3

plant devised for the investigation of wells by means of microsounding devices. The measuring method is described, the results of the measurement are given, and the way in which they are entered into the diagram is shown. The use of the diagram is then explained by means of an example. There are 4 figures and 2 Soviet references.

ASSOCIATION: Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. akad. I. M. Gubkina (Moscow Institute of the Petroleum chemical and Gas Industry imeni Academician I. M. Gubkin)

SUBMITTED: September 2, 1958

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DAKHNOV, V.N.; KOBRANOVA, V.N.; PECHERNIKOV, V.F.; BENDEL'SHTEYN, B.Yu.; KHOLIN, A.I.; POZIN, L.Z., D'YAKONOV, D.I.; LATYSHEVA, M.G.; DOBRYNIN, V.M.; LARIONOV, V.V.; HEYMAN, Ye.A.; LEBEDEV, A.P.

Terminology and symbols used in applied geophysics. Prikl. geofiz. no.27:223-235 '60. (MIRA 13:12)
(Prospecting--Geophysical methods)

GRECHUKHIN, V.V.; NEYMAN, Ye.A.; YANSHEVSKIY, Yu.P.

Methods of using lateral logging in Pechora Basin coal deposits. Geofiz. razved. no.12:74-100 '63. (MIRA 16:11)

NEYMAN, YE YA

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33441
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B110/B138

S 3400

AUTHORS: Fioshin, M. Ya., Lebedev, I. M., Kazakova, L. I., Gankin, S. Z., Khol'mer, O. M., Gurevich, G. I., Neyman, Ye. Ya.

TITLE: Electrosynthesis of ω-oxypentadecanoic acid

PERIODICAL: Khimicheskaya promyshlennost', no. 1, 1962, 41 - 43

TEXT: ω-oxypentadecanoic acid (I) is produced by "mutual" anodic condensation of ω-acetoxyundecanoic acid (II) and adipic acid monoethyl ester (III), during the electrolysis of an aqueous solution of their salts: $CH_3COO(CH_2)_{10}COO^- + {}^-OOC(CH_2)_4COOC_2H_5 \longrightarrow CH_3COO(CH_2)_{14}COOC_2H_5 + 2CO_2$ and then saponification of ethyl ester. The authors wished to obtain better yields by substituting the aqueous by an alcoholic medium, and the Pt anode by PbO_2, magnetite, and graphite anodes. A cylindrical glass electrolyser with cylindrical, Pt anode, perforated Ni cathode and graphite rod anode concentrically arranged, was

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Electrosynthesis of...

filled with an alcoholic solution of II, III, potash, and soda. Current intensity, voltage, and temperature were measured, and the electrolysis was concluded when 0.7 - 1.0 ml of 0.1 N KOH solution (phenol phthalein) was used per ml of electrolyte. After distilling C_2H_5OH at 20 mm Hg, the following quantities were fractionated at 2 - 5 mm Hg: (a) 30% at 160°C; (b) 25% at 183°C; and (c) 30% at 185 - 200°C. The (c) substance was the ester of I. ~10% ester was separated from (a) and (b). It was saponified for 2 hrs with a 50% KOH solution in the presence of ethanol, then acidified with HCl, and I was extracted with toluene. With 125 ml C_2H_5OH, 21 g II, 45 g III, and 5 g K_2CO_3, the I yield was 45 - 48% at 10 a/dm^2. As 3.42 times the theoretical amount of current is required with an aqueous solution, the yield, 27% must be appropriately divided; 27/3.42 ≈ 8%. As Pt consumption is 150 g ton the possibility of using PbO_2, magnetite, or graphite was studied. The dependence of yield on electrolysis conditions was studied with nonporous graphite in ethyl and propyl alcohol with 112 g of II, 238 g of III, and 24 g of K_2CO_3 at 60 - 65°C. Yield of I, 48 - 50%, was not dependent on the current

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Electrosynthesis of...

intensity in a wide range. Maximum yields were obtained with a II : III ratio of 2 : 1 and 1 : 3 at 12 a/dm^2, 60 - 65°C and a K_2CO_3 concentration of 20 g/liter. Voltage increases rapidly with anode density and decreases with K_2CO_3 concentration. The optimum is 40 - 50 v. With 7 g/liter H_2O, a ratio of II : III = 1 : 3, and at 14 a/dm^2 and 60 - 65°C, the yield is 49.2% decreasing to 35%, with 100 g/liter of H_2O. Optimum yields (49.2% current efficiency) are obtained with ethanol or propanol solutions of 112 g/liter II, 238.6 g/liter III, 24 g/liter K_2CO_3, 7 g/liter H_2O and anode density of 14 a/dm^2 at 60 - 65°C. If the old solution was replaced when acidity reached 1.2 - 1.4 ml of 0.1 N KOH/ml, yield was 44 - 45% (41.5% current efficiency) at 15 a/dm^2 and 65 - 70°C. Yield was almost doubled by using an alcoholic electrolyte (six times the current efficiency). Part II which is bound as a salt and does not react, can be recycled. The higher energy consumption (voltage increase 3 - 4 times) is compensated by increased current efficiency. There are 4 figures, 1 table, and 3 Soviet references.

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NEYMAN, Ye.Ya., inzh.; PIMSHTEYN, P.G., inzh.

Design of spiral high-pressure vessels. Khim.mashinostr. no.2: 23-28 Mr-Ap '64. (MIRA 17:4)

85989

S/141/60/003/004/014/019
E032/E514

24.4000

AUTHORS: Neymark, Yu. I. and Kinyapin, S. D.

TITLE: On the State of Equilibrium on a Surface of Discontinuity

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, 1960, Vol.3, No.4, pp.694-705

TEXT: A large number of papers have been published on the stability of the state of equilibrium of a relay system (Refs.1-17). The method of studying the stability of the equilibrium state of a relay system which was put forward by the present authors in Ref.13 was later applied by Kinyapin (Ref.17) to a two-stage relay system, and by Ayzerman and Gantmakher (Ref.20) to the general problem. The latter paper was read at the First All Union Conference on Theoretical and Applied Mechanics. The present paper is concerned with the general problem of stability of the state of equilibrium on a surface of discontinuity. The treatment is based on the method of point representations, and the theorem given by the first of the present authors in Refs. 18 and 21, which is concerned with the relation between the stability of a fixed point of a point representation in the critical case when all the roots of the characteristic equations are equal to unity, and the stability of the equilibrium

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E032/E514

On the State of Equilibrium on a Surface of Discontinuity

state of a system of differential equations obtained from this point representation by way of a limit transition. Suppose that the righthand parts of the system of differential equations have a discontinuity of the first kind on some smooth surface S so that the system can be written down in the form

$$\dot{x}_i = \begin{cases} f_i^+ (x_1, x_2, \ldots, x_n) & \text{when } x_n > 0 \\ f_i^- (x_1, x_2, \ldots, x_n) & \text{when } x_n < 0 \end{cases} \quad (i = 1,2,\ldots,n). \quad (1)$$

The functions f_i^+ and f_i^- are looked upon as sufficiently smooth (it is sufficient to assume that their third differential coefficients are continuous), and in particulan it is assumed that in the neighbourhood of the point $M^*(0,0,\ldots,0)$ they can be written down in the form

$$f_i^+ = a_i^+ + \sum_{j=1}^{n} a_{ij}^+ x_j + \omega_i^+ (x_1, x_2, \ldots, x_n);$$

$$f_i^- = a_i^- + \sum_{j=1}^{n} a_{ij}^- x_j + \omega_i^- (x_1, x_2, \ldots, x_n), \quad (2)$$

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On the State of Equilibrium on a Surface of Discontinuity

where a_i^+, a_i^-, a_{ij}^+, a_{ij}^- are constants and the terms ω_i^+ and ω_i^- are not less than of the second order of small quantities in x_1, $x_2, \ldots x_n$. The phase space of the system given by Eq.(1) is divided into two parts G^+ and G^- by the surface $x_n = 0$. In each of these the motion of a phase point is governed by one of the equations in Eq.(1). On the surface S itself, the motion of the phase point is not defined by Eq.(1). In order to define its motion on this surface, the following four cases must be considered:

$$1)\ \dot{x}_n^+ = f_n^+ > 0; \qquad \dot{x}_n^- = f_n^- > 0;$$

$$2)\ \dot{x}_n^+ = f_n^+ < 0; \qquad \dot{x}_n^- = f_n^- < 0; \qquad (3)$$

$$3)\ \dot{x}_n^+ = f_n^+ < 0; \qquad \dot{x}_n^- = f_n^- > 0;$$

$$4)\ \dot{x}_n^+ = f_n^+ > 0; \qquad \dot{x}_n^- = f_n^- < 0.$$

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On the State of Equilibrium on a Surface of Discontinuity

In the first and second cases a phase trajectory passes through a point M on the surface of discontinuity, from the half-space G^- to G^+ and, correspondingly, from G^+ to G^-. In the third case the phase point remains on the surface $x_n = 0$ until the third condition is no longer satisfied. Finally, in the fourth case the motion of the phase point M is undefined. In the case of the corresponding physical system, this means that the phase point M will be displaced into the half-space G^+ or G^-, depending on random effects. The regions π^+, π^-, C and D on the surface $x_n = 0$ (cf.Fig.1), which correspond to the four cases enumerated in Eq.(3), are separated from each other by the curves γ^+ and γ^- on which $f_n^+ = 0$ or $f_n^- = 0$, respectively. The possible behaviour of the phase trajectories near the bounding curves γ^+ and γ^- is shown in Figs. 2a and 2b. The present authors derive an analytical criterion for distinguishing between these cases and the general aim is to study the behaviour of the phase trajectories in the neighbourhood of the intersection of the γ^+ and γ^- curves and, in particular, to determine the conditions under which all the phase

On the State of Equilibrium on a Surface of Discontinuity

curves in the neighbourhood of a point M, which are common to γ^+ and γ^-, asymptotically approach this point for $t \to \infty$. The point M is defined as the stable state of equilibrium. The analysis is continued using a set of coordinates having the origin at an arbitrary point corresponding to the intersection of the γ^+ and γ^- curves. The coefficients a_n^+ and a_n^- then vanish and, in order that the origin $M^*(0,0,\ldots,0)^n$ should be a stable state of equilibrium, it is necessary that the first of the two cases shown in Fig.2 should occur in the neighbourhood of M^*. When this necessary condition is satisfied, then the phase trajectories in the neighbourhood of M^* define the point representation T^+ and T^- on the S surface. The results of the paper are summarized in two basic theorems which give the stability conditions for the point $M^*(0,0,\ldots,0)$, depending on the values of the parameter d which is defined by

$$d = ab,$$

where

$$a = 2\sum_{j=1}^{n} a_{nj}^- a_j^+ \left(\sum_{j=1}^{n} a_{nj}^+ a_j^+\right)^{-1}$$

Card 5/6

[redacted], Yu.I.; [redacted], N.A.

Stability of equilibrium states of monobolomeni[redacted]
AN SSSR 160 no.4:781-784 F '65.

1. Gor'kovskiy gosudarstvennyy universitet im. N.I. [redacted]kogo.
Submitted July 28, 1964.

NEYMAN, Yu.M.

Weights of angles and lines in the adjustment of polygonal traverses. (MIRA 14:10)
Geod.i kart. no.8:20-23 Ag '61.
(Traverses (Surveying))

BALANDIN, A. A., BOGKANOVA, O. K., ISAGULYANTS, G. V., NEYMAN, Yu. V., and POPOV, Ye. I.
(Inst. of Organic Chem. AS USSR)

, "Investigation of the Mechanism of Successive Reactions Butane-Butylene-Divinyl by Using Radioactive Carbon C^{14}." p. 52.

Isotopes and Radiation in Chemistry, Collection of papers of 2nd All-Union Sci. Tech. Conf. on Use of Radioactive and Stable Isotopes and Radiation in National Economy and Science, Moscow, Izd-vo AN SSSR, 1958, 380pp.

This volume published the reports of the Chemistry Section of the 2nd AU Sci Tech Conf on Use of Radioactive and Stable Isotopes and Radiation in Science and the National Economy, sponsored by Acad Sci USSR and Main Admin for Utilization of Atomic Energy under Council of Ministers USSR Moscow 4-12 Apr 1957.

NEYMAN, Yu.V.; SMOLIN, V.V.

Wind roses and building in Magnitogorsk. Trudy GGO no.149: 48-52 '63. (MIRA 17:1)

1. Magnitogorskaya sanitarno-epidemiologicheskaya stantsiya.

NEYMAN, Yu.Yu., inzhener.

Calculating the drums of excavator winches. Vest.mash. 33 no.3:14-15 Mr '53. (MLRA 6:5)
(Excavating machinery)

NEMAN, L. B.

A catalog of large asynchronous three-phase circuit electric motors; series [illegible], LAP and DBP. Moskva, 1948. 17 p. (51-31221)

TK2785.N3 1948a

105-6-9/26

AUTHOR: MEYMAN, Z.B., Ing.

TITLE: Powerful Electric Synchronous Motors with Massive Poles on the Rotor (Moshchnyye sinkhronnyye elektrodvigateli s massivnymi polyusami na rotore- Russian)

PERIODICAL: Elektrichestvo, 1957, Nr 6, pp 32 - 35, (U.S.S.R.)

ABSTRACT: A series of synchronous motors with a performance of 1300, 2000, and 3000 kw was developed by the "Uralelektroapparat" plant for the purposes of driving high-speed driving mechanisms. They have a massive rotor with full pole shoes and a special short-circuited winding, which warrants greater operational reliability. The motor is started asynchronously by direct connection to full voltage or by means of a reactor by the reduction of voltage down to 70% of the nominal voltage. The fronts of the poleshoes are on both sides of the rotor connected by means of copper rings, so that part of the current is short-circuited by these rings. The rings increase the value of the asynchronous moment considerably. A moticeable influence upon the increase of the asynchronous moment is exercised by the short circuiting of the excitation winding with the discharge resistance. At present there exists no accurate method of computation for the exact determination of the starting characteristic of motors with smooth-core rotors. In the case of smooth cores (full poles), especially if the ratio between the width of the groove of the stator and the sizes of the air gap is assumed to be more than one, lossed increase considerably. In the case of the motors of the series DSP described here this ratio is somewhat higher than one, and

Card 1/2

PHASE I BOOK EXPLOITATION 479

Bezrukov, V.M.; Glukh, Ye. M.; Kostin, K.F.; Neyman, Z.B.; Fishler, Ya. L.; Chetchuyev, G.A.

Ural'skiy zavod elektromashinostroyeniya (The Ural Electrical Machine-building Plant) Moscow, Mashgiz, 1957. 125 p. (Series: Iz istorii mashinostroyeniya na Urale, vyp. 7) 4,000 copies printed.

Tech. Ed.: Dugina, N.A.; Editorial Board of Series: Aleksandrov, A.I., Candidate of Technical Sciences; Bogachev, Doctor of Technical Sciences; Volskov, A.A., Candidate of Historical Sciences; Dovgopol, V.I.; Kozlov, A.G., Senior Scientific Worker, Archives Dept.; Sustavov, M.I., Engineer.

PURPOSE: This book is intended for engineers, technicians and scientists. It can also be of use to students, agitators, propagandists and machine-building workers.

Card 1/3

The Ural Electrical Machine-building Plant 479

COVERAGE: The book contains a brief history of the construction and development of the Ural Electrical Machine-building Plant and a detailed description of the progress achieved in designing and building various kinds of machinery including water-wheel generators, a-c and d-c electrical machines, transformers, high-voltage equipment, mercury-arc rectifiers and machines for the electrification of the national economy. Plans for the future development of the plant and of the production of the electrical industry in general are also discussed. The book is the seventh issued in the series "Iz istorii mashinostroyeniya na Urale" (History of Machine-building in the Urals) which will contain a total of ten books. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

Card 2/3

AVAILABLE: Library of Congress

JJP/ksv
8-5-58

Card 3/3

AUTHOR: Neyman, Z.B., Engineer. 104-3-11/45

TITLE: Questions on the design of powerful hydro-generators. (Voprosy proyektirovaniya moshchnykh gidrogeneratorov.)

PERIODICAL: "Elektricheskiye Stantsii" (Power Stations), 1957, Vol.28, No.3, pp. 34 - 41 (U.S.S.R.)

ABSTRACT: This is an article on special features of the design of hydro-alternators with reference to the type of turbine and the special features and character of the civil engineering structure. The turbine-alternator sets are organically related to the entire arrangement of the station, particularly when the machine room is built directly in the body of the dam and not as a separate building.

The maximum power and runaway speed of hydro-alternators is considered from first principles and it is shown that the maximum power of a generator depends mainly on the maximum permissible peripheral speed and the active length of the stator steel which are 150 m/sec for solid and 130 m/sec for laminated rotors and 3 - 4 m respectively. Solid steel can only be used for high speed rotors because of transport limitations on diameter. A major factor in limiting generator output is then the ratio of the runaway speed to the rated speed which is usually taken as 1.8 - 2.2 for radial-axial

Card 1/3

Questions on the design of powerful hydro-generators. (Cont.)

turbines and 2.3 - 2.8 for rotating blade turbines. However, the full runaway speed is rarely developed in practice because safety devices are very effective and overspeed runs are no longer made in the factories. Therefore, since the runaway speed has a great influence on the cost of the machine it is now usual to assume that the runaway speed will not be greater than 80% over the normal speed, or greater than 60% for very large sets.

The moment of inertia is then considered and it is concluded that the natural moment of inertia suffices in most cases. However, in order to prevent water hammer it is sometimes necessary to increase the moment of inertia in order to limit the overspeed to 130% when full load is thrown off.

The optimum generator voltage is considered. The generator is usually connected to a transformer, a limiting factor is the maximum current at the terminals because generator switchgear cannot handle more than about 6 000 A. This governs the generator voltage. Generators can be made with two or three sets of phases per pair of poles in connection with special transformers. However, it is usually best to limit the stator current to 6 000 - 7 000 A with double windings and two sets of busbars, so that the windings are connected in

Questions on the design of powerful hydro-generators. (Cont.)

parallel beyond the terminals.

The static and dynamic stability of generators is then considered, this depends mainly on the synchronous and transitional reactances, the short circuit ratio and the rate of rise of excitation. Reduction of the reactances or increase in the short circuit ratio increases the size and weight of the generator. The best way of improving the stability of large generators is to use an excitation system with rapid response and suitable forcing. With the circuit used in the Kuibyshev generators the excitation circuit time constant is about 0.15 sec.

However, rectifier excitation is more effective and economical and can give a very low time constant and 4 - 5 fold forcing with a rate of voltage increase of 40 kV/sec. The weight of an excitation system using metal-clad mercury arc rectifiers is much less than that of other types, the height of the set is reduced and its construction is simplified.

Generator design is then considered with particular reference to location of the thrust bearings and to the use of special thrust bearings. It is concluded that it will be quite possible to make sets of more than 200 MW. There are 7 figures and 3 Slavic references.

AVAILABLE: Library of Congress

Card 3/3

SOV/110-58-12-1/22

AUTHOR: Kostin, K.F., Engineer and Neyman, Z.B., Engineer

TITLE: 15 Years of Hydro-Generator Manufacture at the Uralelektroapparat Works (15 let gidrogeneratorostroyeniya na zavode „Uralelektroapparat")

PERIODICAL: Vestnik Elektropromyshlennosti, 1958, Nr 12, pp 1-7 (USSR)

ABSTRACT: Hydro-generator production commenced in the Urals in 1943 and at present the "Uralelektroapparat" Works manufactures machines in ratings from 160 to 36000 kW for voltages of 400, 6300 and 10500 V at speeds of 68.5 to 600 rpm and is designing others with outputs of some hundreds of megawatts per unit. A photograph of the first hydro-generator manufactured at the works in 1943 is reproduced in Fig 2; it is a 1200 kW, 6300 V, 150 rpm machine for the Alapayevskaya station, where it is still working. At that time the urgent need for new equipment was met by a standardised series of hydro-generators developed for cheap and easy manufacture. The works designed and manufactured five standardised series of vertical hydro-generators with outputs from 160 to 4000 kW, running at speeds of 100 to 428 rpm. The main characteristics of the five series are briefly

Card 1/4

15 Years of Hydro Generator Manufacture at the Uralelektroapparat Works

described. All were designed for automatic control and, due to various novel features, were much lighter than previous machines of similar output. A photograph of a typical hydro generator of the first series is shown in Fig 3. In addition to the standard series, individual designs were produced from 1946. In this year two hydro generators were manufactured each with an output of 14,400 kW at 10,500 V at a speed of 150 rpm. A special feature of these machines is a cooling system in which the coolers are located in the corners of the square stator frame. Machines of the overhung construction were designed primarily for the use with Kaplan turbines. For instance, a 20-MW, 150 rpm machine of the overhung type with one guide bearing has a total weight of 265 tons, which is 40 tons less than the corresponding machine of suspended type construction, and the height is 1.5 m less. More extensive use is being made of constructions in which the turbine and generator have a common shaft and the thrust bearing

Card 2/4

15 Years of Hydro-Generator Manufacture at the Uralelektroapparat Works

is mounted on the turbine casing, the principle is used for the 21 MW, 125 rpm sets for the Kamskaya Station. This type of construction is illustrated in Fig 5. The turbine and generator are still further unified in a horizontal shaft type of machine in which the generator rotor is shrunk on to a wheel that supports the turbine blades whilst the water flows within the rotor. Although these turbines have not performed very well in service, because of a number of constructional defects, their design was a progressive step. In all the machines manufactured in recent years there is only a main exciter and no auxiliary exciter. Methods adopted to improve the mechanical stability of generators running at 300 to 600 rpm are described and illustrated in Fig 6. A number of constructional details that have been developed in recent years are mentioned with particular reference to cooling braking and bearings. The typical lubrication system is briefly described. The works played an active part in the design of alternators for the Volga Power Station imeni Lenin

SOV/110-58-12-1/22

15 Years of Hydro-Generator Manufacture at the Uralelektroapparat Works

in which ionic exciters were used with success. At the present time the works is designing hydro-generators of some hundreds of megawatts for the Krasnoyarsk Station and their construction is briefly described. The total weight of these machines will be about 1,900 tons and the efficiency 98.25%. There are 7 figures.

SUBMITTED: 30th June 1958

Card 4/4

Heyman Z B

AUTHOR: Heyman, Z.B., Engineer

TITLE: High-speed Synchronous Salient-pole Motors with Massive Poles (Bystrokhodnyye sinkhronnyye yavnopolyusnyye dvigateli s massivnymi polyusami)

PERIODICAL: Vestnik Mashinostroyeniya, 1 [illegible], Vol.39, No.3, p. 24 - 29 (USSR).

ABSTRACT: Salient-pole synchronous motors with asynchronous starting arrangements can be made for speeds up to 1 500 r.p.m. However, with the usual type of rotor, having laminated poles and a starting winding in the pole-shoes, the maximum speed of salient-pole motors of 1 000 - 5 000 kW seldom exceeds 1 000 r.p.m. The main difficulty in making 1 500 r.p.m. motors consists in making a reliable starting winding. The windings are damaged because current distribution and, consequently, heating in them is not uniform. Heating and current data for the starter-winding bars of an 800 kW synchronous motor are given in Fig.1. The test results show that the current in the outermost rod is 1 1/2 times that in the middle rods, and the heating is twice as great. The German firm of A.E.G. has a design in which each starter-winding bar can expand separately, but this feature is of doubtful merit because it is not sufficiently reliable.

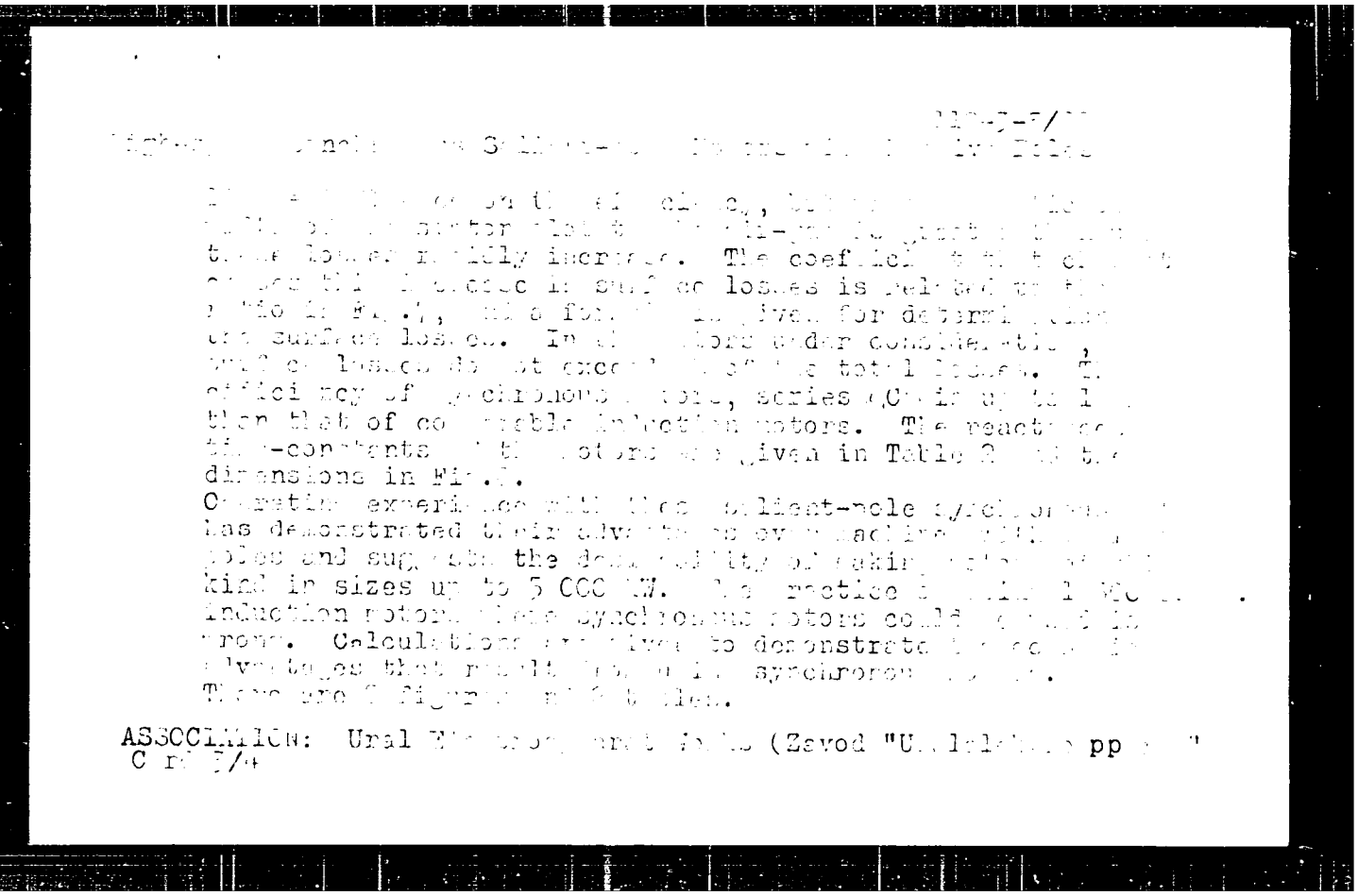
Card1/4 Good operating results and reliability have been obtained with

110-3-5/21

High-speed Synchronous Salient-pole Motors with Massive Poles

1 500 r.p.m. synchronous salient-pole motors with solid rotor poles of the series ДСП made by the Ural Elektroapparat Wo . They have no short-circuited starter winding, and are simply started by connecting them to the supply, if need be at red d voltage. The startin torque results from circulating cur . the solid pole-shoes. The construction of such a rotor is illustrated in Fig.2, and Fig.3 gives the starting characteri of 1 300 and 3 000 kW machines in the series ДСП. An oscill - gram of a direct-on start of a 1 300 kW 1 500 r.p.m. motor with the rotor winding connected to the discharge resistance is giv in Fi .4. During starting tests, the ter erature of the pole shoes did not exceed 100 °C. Technical data of electrical m series ДС with outputs of 1 300, 2 000 and 3 000 kW are give in Table 1. The 2 000 kW motor is intended for driving a compressor and has a specially high moment of inertia. These motors are designed for starting direct-on or through reactor. The exciters are mounted on the same shaft. Radial-axial ventilation is used. The stator coils are insulated with impregnated mica. The bearings and lubrication system are described. The weight and efficiency of these motors are given in Figs. 5 and 6, in comparison with data for induction motors. The surface losses due to higher harmonics of the stator m

Card2/4



High-speed Synchronous Salient-pole Motors with [illegible]

SUBMITTED: July 19, 1957.

AVAILABLE: [illegible]

Card 1/1

1. Synchros-Design 2. Synchros-Operation 3. Synchros-Test results

SOV/110-59-7-2/

AUTHOR: Neyman, Z.B., Engineer

TITLE: Alternating-current Machines of the Uralelektr
Works (Elektricheskiye mashiny peremennogo toka
"Uralelektroapparat")

PERIODICAL: Vestnik elektropromyshlennosti, 1959, Nr 7, pp 3-9 (U

ABSTRACT: This article describes the various types of a.c. machine
manufactured by the works. The first series of a.c.
machines designed by the works is series DA wound-rotor
induction motors with outputs ranging from 250 to 1000 kW.
There are two frame sizes; many parts and assemblies are
standardized. Technical data of vertical and horizontal
squirrel-cage induction motors for driving pumps are given
in Table 1. These have double-cage (Boucherot) rotors.
The cage active during starting is of brass; the other
is of copper. The works has also manufactured special
induction motors for driving such equipment as rolling
mills, suction dragers and special pumps of high output.
In particular there is motor type DAP260 of 4400 kW,
300 rpm, 6000 V, with a power factor of 0.8, for driving
the largest suction dredgers with an output of 1000 m3/hr
at a head of 80 metres. This motor is briefly described

Card 1/4

Alternating-Current Machines of the Uralelektroapparat Works

The production of induction motors is increasing and about 75% of all the a.c. machines produced by the works are synchronous machines. Types of up to 1500 kW are used for driving reciprocating compressors, and technical data of these motors are given in Table 2. All the compressor motors are designed for direct-on-line starting with the exciter solidly connected. Special motors are made for driving pulverising mills used in power stations, cement works and elsewhere; the main technical data of these machines are given in Table 3. The works is a principal supplier of large vertical synchronous motors for driving pumps, such as are illustrated in Figs 3 and 4. These motors are made with outputs ranging from 1000 to 6000 kW at speeds from 600 to 250 rpm; their technical data are in Table 4, and brief constructional details are given. Table 5 relates to the horizontal salient-pole motors series DSP of 1500 rpm with outputs of 1350 to 5000 kW manufactured for large fan and pump drives in the metallurgical industry. These motors are described briefly. The works manufactures synchronous condensers series KS with outputs of 15 and 30 MVA, also series KSZ

Alternating-Current Machines of the Uralelektroapparat Works

with outputs of 37.5 and 75 MVA, hydrogen-cooled and for outdoor installation. Table 6 shows technical data, and a typical 75 MVA synchronous condenser with hydrogen cooling is illustrated in Fig 6. The works is a pioneer in the use of cold-rolled steel in synchronous machines. A careful design study has been made and in many cases it is possible by the use of such steel to reduce the size of the machine by 10-12%, whilst at the same time reducing heating losses by 5-10% and conserving copper and insulating materials. It is intended to extend the use of cold-rolled steel in machine manufacture. At present the works is developing a new series of a.c. machines including vertical two-speed motors of 2000 kW, large compressor-motors for operation in explosive atmospheres, salient-pole high-speed synchronous machines, and others. New types of synchronous condensers are to be manufactured with hydrogen cooling and outputs of up to 100 MVA, also

Alternating-Current Machines of the Uralelektroapparat Works

two-speed machines of output up to 60 MW for pumped-storage stations.
There are 6 figures and 6 tables.

SOV/110-59-8-5/24.

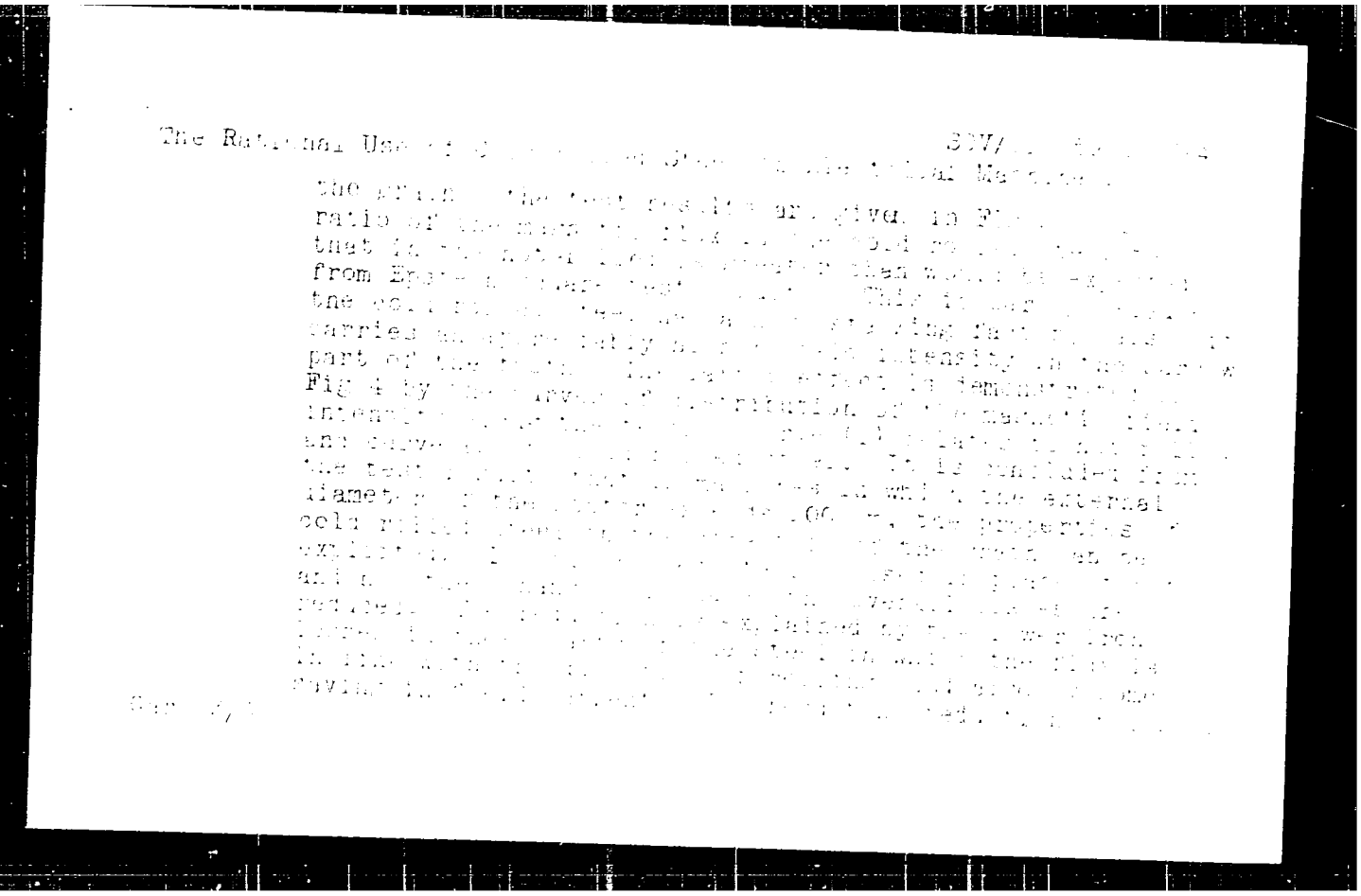
AUTHORS: Lokshin, D.V., Neyman, Z.B. Engineers.

TITLE: The Rational Use of Cold-rolled Steel in Electrical Machines.

PERIODICAL: Vestnik elektropromyshlennosti 1959, Nr 8, pp 18-23 (USSR)

ABSTRACT: The relative merits of hot-and cold-rolled steel for the manufacture of electrical machines are discussed in general terms. Because of the magnetic anisotropy of cold-rolled steel, the advantages to be gained by its use depend on the geometry of the stator segments. It is very difficult to calculate the magnetic characteristics of a stator core made of cold-rolled steel from test results obtained on the Epstein square. Accordingly the authors tested packets of stator stampings by a method which has been described previously and may be readily understood by reference to Fig 2. Experimental determinations were made of the magnitude of the magnetic flux in the teeth and in the body of the stampings. The results that are given relate to

two types of machine with stator external diameters of 213 and 325 mm respectively. The stampings were of steel grade E320, 0,5 mm thick, which is a medium grade of cold-rolled steel, and were compared with stampings of hot-rolled steel grade E42, 0,5 mm thick. The stampings were not annealed. Results of a.c. and d.c. tests were practically identical. The test conditions were such that with both types of stamping the magnetic induction in the teeth was much greater than in the body of the stamping and, therefore, it was mainly the teeth that were being tested. Test results for stampings of the smaller diameter are given in Fig 3a. These curves show the magnetic flux densities in the designed section of the teeth as functions of the magnetising force applied to the stampings divided by the length of the magnetic flux path in the teeth. This ratio, though arbitrary, is useful. It will be seen from Fig 3a that with equal values of m.m.f. the magnetising flux in the cold-rolled stampings is 1,12 to 1,26 greater than in those not rolled. In this case the stampings were in line with the grain of rolling. In testing the second and larger size of stampings, the direction of the magnetic flux in the teeth was at 0 to 11° to the direction of



may often be appreciable but is not the best that can be obtained. Calculations are then made to show that the optimum geometry of the machine is altered when cold-rolled steel is used. Expressions are derived for the iron losses and these are then applied to particular machines. The first machine considered is one with a stator 213 cm diameter of hot-rolled steel grade E-42, in the output range of 900 to 7500 kVA and the speed range of 375 to 600 rpm: a number of other typical characteristics are given. Using this machine as a basis for comparison, curves are plotted in Fig 5a relating the stator length to the losses, weight and field current of corresponding machines made of cold-rolled steel. The curves show that if the stator length is reduced by 10 to 15% when the cold-rolled steel is used, the iron losses are increased by some 6 to 12%. However, the total losses in the active material are reduced by 4 to 5% and the weight of active material is reduced by 9 to 10%; or alternatively, the losses may be reduced by 6 to 6.5% and the weight of material by 6 to 8%. If the length of stator is unaltered,

the steel losses are reduced by 4% and the overall losses by only 1%, with an economy of copper of 3.5%. A similar comparison is then made for machines with an external stator diameter of 325 cm covering the range of 1000 to 10000 kVA and 150 to 250 rpm; the corresponding curves for a machine using cold-rolled steel are in Fig 5b. It will be seen from these curves that the use of cold-rolled steel gives the best result when the stator length is reduced by about 10%. The total losses in the active materials are then reduced by 4% if the weight of copper is cut by 11%, or are reduced by 8% if the weight of copper is cut by 6%. The reduction in the length of the stator also gives economy in insulation and other constructional materials. The curves of Fig 5a and b relate to machines of average characteristics, but in particular cases the effectiveness of using cold-rolled steel may be very much greater. By way of example, Fig 5B gives curves of loss and weight ratios on altering the length of a hydro-alternator with an output of 26300 kVA running at 130 rpm with an external stator diameter of 700 cm. It will

Rational Use of Cold-rolled Steel in Electrical Machines.

be seen that here the use of cold-rolled steel makes it possible to reduce the stator length by 10% and simultaneously to reduce the losses in the active material by 4% and the weight of copper by more than 15%: alternatively, the losses may be reduced by 10% and the weight of copper by 7%. These examples clearly show that when cold-rolled steel is used the optimum proportions of the machine are in general not the same as when hot-rolled steel is used. There are 5 figures and 3 Soviet references.

SUBMITTED: January 26, 1959.

NEYMAN, Z.B., inzh.

Vertical synchronous motors for driving large pumps. Vest. elektroprom. 33 no.3:29-33 Mr '62 (MIRA 15:3)
(Pumping machinery, Electric) (Electric motors, Synchronous)

NEYMAN, Z.B., inzh.

Two-speed vertical-shaft asynchronous motors. Vest.elektroprom. 33 no.12:40-43 D '62. (MIRA 15:12)
(Electric motors, Induction)
(Electric power plants--Equipment and supplies)

ETTINGER, Ye.L., kand.tekhn.nauk; GLUKH, Ye.M., kand.tekhn.nauk; GOL'DIN, R.G., inzh.; TITOV, V.V., kand.tekhn.nauk; NEYMAN, Z.B., inzh.

Concerning L.V.Rosman's article. Vest. elektroprom. 34 no.1: 62-64 Ja '63. (MIRA 16:1)
(Electric generators) (Rosman, L.V.)

NEYMAN, Z.B., inzh.

Problems concerning the design of a large salient-pole synchronous machine with solid rotor poles. Vest. elektroprom. 34 no.2:3-8 F '63. (MIRA 16:2)
(Electric machinery, Synchronous)

MEYMAN, Z.B., inzh.

Outdoor-type vertical-shaft mot[illegible]. Elek. sta. 34 no.5:43-45 My '63. (MIRA 16:7)

(Pumping machinery, Electric)
(Electric motors)

NEYMAN, Z.B., inzh.; GOL'DENBERG, S.I., inzh.

Synchronous machines with aluminum excitation windings.
Elektrotekhnika 35 no.1:26-29 Ja '64. (MIRA 17:2)

NEYMAN, Z.B., inzh.

Large units with three-phase salient pole generators for operation with single-phase load. Elektrotekhnika 35 no.9:7-8 S '64. (MIRA 17:11)

L 40[illegible]-66 EWT(1) IJP(c)

ACC NR: AP6025598 SOURCE CODE: UR/0413/66/000/013/0038/0038

INVENTOR: Lokshin, D. V.; Neyman, Z. B.

ORG: none

TITLE: Unipolar machine. Class 21, No. 183263

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 38

TOPIC TAGS: electric generator, ELECTRIC ROTATING EQUIPMENT

ABSTRACT: This Author Certificate introduces a unipolar electric generator with a liquid sliding contact (see Fig. 1). The generator contains a stator with a built-in

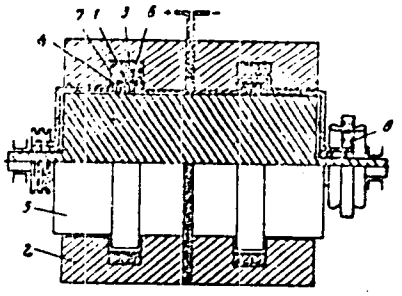


Fig. 1. Unipolar generator

1 - Liquid sliding contact; 2 - stator; 3 - excitation winding; 4 - rotating contact ring; 5 - rotor; 6 - fixed contact ring; 7 - auxiliary contact ring; 8 - drive.

Card 1/2 UDC: 621.313.291.3.067

L 40[illegible]-66

ACC NR: AP6025598

excitation winding. The rotating contact ring is mounted on the rotor. To assure stable operation, the machine is provided with a fixed contact ring which serves as a current carrier and an auxiliary contact ring which covers both rings and is rotated by a separate drive. Orig. art. has: 1 figure. [IV]

SUB CODE: 10/ SUBM DATE: 15Jun64/ATD PRESS: 5049

Card 2/2 MLP

ACC NR: AP6035860 (A, N) SOURCE CODE: UR/0413/66/000/020/0071/0071

INVENTOR: Lokshin, D. V.; Neyman, Z. B.; Tsirkunenko, A. T.

ORG: none

TITLE: Homopolar generator. Class 21, No. 187131

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 71

TOPIC TAGS: electric generator, homopolar generator, generator rotor, electric rotating equipment part

ABSTRACT: An Author Certificate has been issued for a radial-type multi-rotor homopolar generator with rotors which revolve in opposite directions. Each rotor consists

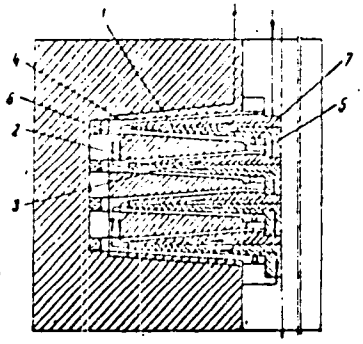


Fig. 1. Homopolar generator

1 - Rotor; 2 - upper disk of rotor; 3 - lower disk of rotor; 4 - perepherial liquid contact; 5 - central liquid contact; 6 - magnetic ring; 7 - rotor bearing.

Card 1/2 UDC: 621.313.291-233.2

ACC NR: AP6035860

of two conductive disks separated by insulation which are connected in series by liquid contacts along the periphery. To increase reliability and mechanical stability the magnetic rings are placed between the rotors (see Fig. 1). These rings are fastened on one side to the magnet yoke; their other side is used for rotor-bearing mounting. Orig. art. has: 1 figure.

SUB CODE: 10/ SUBM DATE: 15Jun64/

Card 2/2

AUTHOR: Meyman, B.N., Engineer. 335

TITLE: Structure and method of analysis of the total production. (Struktura i metodika analiza valovoy produktsii.)

PERIODICAL: "Energomashinostroenie", (Power Machinery Construction), 1957, No. 4, pp. 20 - 23, (U.S.S.R.)

ABSTRACT: The method of analysis of the total production in heavy engineering work, including boiler and turbine works, is described and a formula is derived which determines the interrelation between various factors influencing the overall production. Application of the derived formula is illustrated by practical examples. The over-all production is defined as the actual production during a given period of time, irrespective of whether the manufacture of the goods is still in progress, or whether it has been completed. 2 tables.

MEYMAN, Z.N., inzh.

Methods for analyzing total production. Vest.mash. 40 no.4:74-79 Ap '60. (MIRA 13:6)
(Industrial management)

NEYMAN, Z.N., dotsent

Indices of production and labor productivity. Energomashinostroenie 11 no.5:32-35 My '65. (MIRA 18:6)

L 41065-66 EWT(m)/T/EWP(t)/ETI/EWD(k) IJP(c) JD/HW/DJ/JH

ACC NR: AP6030590 (A, N) SOURCE CODE: UR/0413/66/000/016/0073/0074

INVENTOR: Malenok, F. T.; Voronov, I. A.; Chernyak, S. N.; Levitskiy, V. Kh; Bekhelev, V. P.; Astaf'yev, A. D.; Tserering, L. A.; Neyman, Z. Ya.; Treshchevskaya, R. A.

ORG: none

TITLE: Lubricant for high-speed rolling of aluminum foil. Class 23, No. 184998

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 16, 1966, 73-74

TOPIC TAGS: aluminum foil, aluminum foil rolling, high speed rolling, rolling lubricant, METAL ROLLING, HYDROCARBON LUBRICANT

ABSTRACT: This Author Certificate introduces a petroleum product-base lubricant containing up to 1.0% oleic acid for high-speed rolling of aluminum foil. To obtain high-quality surface finish of the foil without washing it before annealing, DC diesel fuel oil (GOST 4749-49) is used as the lubricant base. [NS]

SUB CODE: 11, 13/ SUBM DATE: 28Apr65/ ATD PRESS: 5076

UDC: 621.892.2

Card 1/1

NEYMAND, M.V.

W 5718. RAPID SEMI-MICRO METHOD OF COAL ANALYSIS. Oreshko, V.P. and Neimand, M.V. (Zavod. Lab. (Fact. Lab., Moscow), 1953, vol. 19, (5), 291-29[illegible]. abstr. in Ref. Zh. Khim. (Ref. J. Chem., Moscow), 1955, (10), 19100). A dry 0.2 g sample ground to 0.2 mm is heated at 500± 10° for 15 min. Solid residue, tar and water are determined by weight. The determination takes 25-30 min and is more accurate than that given in U.S.S.R. standard GOST 3168-46.

(1)